AMENDMENTS TO THE SPECIFICATION

IN THE SPECIFICATION:

Page 4

Between lines 10 and 11, insert the following new paragraphs:

FIG. 1C is a sectional view of the first variation of the second embodiment of the magnetic suspension bearing of the invention.

FIG. 1D is a sectional view of a second variation of the second embodiment of the magnetic suspension bearing of the invention.

FIG. 1E is a sectional view of a third variation of the second embodiment of magnetic suspension bearing of the invention.

Page 6

Replace the paragraph beginning on line 5 as follows:

The loading section 70 is a friction pad and is generally made from molybdenum disulfide. It mainly provides support for the spindle 10. In practice, many alterations may be made. FIG. 1B illustrates a second embodiment of the invention. Compared with the first embodiment, the main difference is that in the first embodiment the spindle 10 is inserted into the cavity 71. In the event of obliquity into the spindle 10, friction loss takes place and may result in decreasing rotation speed and increased electric current. Thus the second embodiment provides an improvement for the loading section 70. The loading section 70 has substantially a flat top surface, and supports the spindle 10 in a single point contact condition. Thus it can avoid the friction and wear that might otherwise happen to

Office Action dated May 25, 2004 Application No. 10/626,662
Reply filed August 20, 2004 Art Unit 2834

Attorney Docket No. 3313-1018P

the periphery of the spindle 10 and the cavity 71. As a result, vibration and noise may be

reduced and the spindle 10 can rotate steadily and smoothly. The contact surface of the

loading section 70 and the spindle 10 is not necessary necessarily a flat surface. It may

also be a concave surface as shown in FIG. 1D or an arched convex surface as shown in

FIG. 1E as long as a single point contact is formed.

Another variation of the second embodiment is shown in FIG. 1C. In this

arrangement, the magnetic center line, that is, the line between the north and south poles

of the spindle magnetic unit, is lower than the magnetic center line of the stator magnetic

unit. As a result, force is generated in the downward direction, causing an axial

prestressing force to the spindle. Thus, the friction between the spindle and the loading

section 70 is increased so that the spindle is less likely to move transversely along the

surface of the loading section 70.

4